

## Ghana Safe Motherhood

### OR Summary 57

## Combine Learning Approaches to Improve Maternal Care

*A comparison showed that two models for teaching maternal care skills to providers resulted in similarly modest improvements in knowledge and performance. However, maternal care skills remained weak overall. Training should incorporate the best elements of the two approaches while seeking improvements in basic knowledge of maternal care.*

### Background

In 1995 Ghana's Ministry of Health (MOH) launched the National Safe Motherhood Programme, a strategy to improve maternal health services and community awareness. As part of the scale-up of this strategy in northern Ghana, the Ministry worked with FRONTIERS to test the relative effectiveness and cost of two alternative approaches: a self-paced learning (SPL) course developed by the PRIME II project; and the three-week residential course originally developed by the MOH and PRIME.

The study took place between 2001 and 2004 in two administrative regions in northern Ghana. Forty providers (midwives and physicians) in the experimental group received six months of SPL in addition to a one-week residential training course. In the comparison group, 35 providers attended the three-week residential course. Both courses covered theoretical and clinical training in life-saving skills, obstetric and infant care, family planning counseling, and postabortion care.

Researchers visited 38 public health centers and hospitals in the two study regions to assess their ability to provide services that met the minimum standards as defined by the MOH. They measured changes in providers' knowledge and performance through pre- and post-intervention interviews with

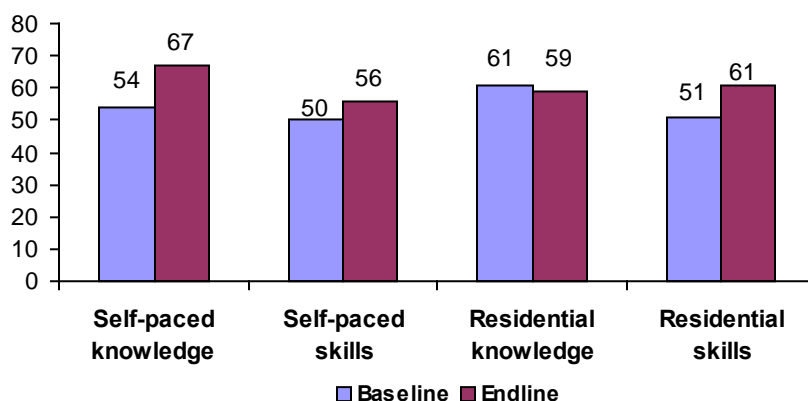
trainees, clinic observations, simulated medical scenarios (to assess less common phenomena such as obstetric complications and emergencies), and exit interviews with clients. They also compiled statistics on financial expenditures, including costs for equipment and fuel, fees, and estimated staff costs, for each approach.

### Findings

◆ Knowledge improved in the self-paced learning (SLP) group following the intervention, while clinical performance improved in both groups, with the residential group performing slightly better. However, overall levels of knowledge and performance remained low on many indicators, as follows:

✦ Providers' knowledge about maternal care improved significantly in the SPL group while decreasing slightly overall in the control group. However, even after training, providers in both groups scored below the 70 percent minimum level on most knowledge indicators. Total mean scores for knowledge about maternal care remained inadequate (between 59% and 67%) among all providers (see Figure).

**Pre- and post-intervention mean scores for knowledge and performance in routine ANC (%)**



✦ Providers' performance in routine antenatal care improved slightly in both groups, but many gaps remained (see Figure). Skills in performing abdominal examinations and in observing safety measures for taking blood samples were uniformly strong (above the 70% mark), while only about 40 percent of providers had appropriate skills in obtaining clients' medical and behavioral histories or in educating clients.

✦ Providers in both groups performed well in labor and delivery skills. Mean scores for management of obstetric complications, postabortion care, and other pregnancy-related complications improved significantly in the SPL group. However, average scores for performance in the management of complications remained low (between 50% and 60%) in both groups.

◆ In general, hospitals had sufficient infrastructure, supplies, and medications to meet the care standards set by the MOH. Among health centers, clinic readiness was less robust, especially in terms of equipment, including sterile dressings, catheters, oxygen supplies, and IUD kits. Most facilities lacked emergency transportation, and the wait for services was long.

◆ Though it was more effective in terms of improving knowledge and skills, the self-paced learning approach cost more per learner than the residential course (US\$2,154 versus \$1,330), considering both financial and opportunity costs (costs for personnel time). Overall, neither approach was inherently better.

## Utilization

◆ Participants in a dissemination seminar discussed options for maximizing the benefits of both approaches. A committee has been set within the MOH's Health Service to develop next steps.

## Policy Implications

◆ Training should incorporate the best attributes of both approaches and possibly be implemented in larger settings, where higher caseloads offer more opportunities to use the knowledge and skills learned. Basic training on maternal care should be provided at pre- and in-service levels.

◆ Weaknesses in clinical infrastructure and administrative norms constitute fundamental barriers to high-quality care, even if providers' knowledge and skills improve significantly. Policymakers need to develop norms for care at all levels and ensure logistical support to maintain adequate supplies and infrastructure.

January 2006